

On page 1, line 5, change "of this type are known from the related art" to ~~-~~for transmitting

A1 messages using coding by orthogonal functions have been used--.

On page 1, line 9, after "1965" insert --, which is herewith incorporated by reference herein,--.

On page 1, before line 10, insert ~~-~~A method and a device for transmitting messages using

H2 Hermite functions as orthogonal functions are described in European Patent Document No. EP 0 340 853.--.

On page 1, ~~before line 14, insert --Summary of the Invention--.~~

On page 1, ~~line 14, change "The object" to --An object--, after "method" insert --and circuit arrangement-- and change "permits" to --permit--.~~

On page 1, replace line 17, with "This objective is achieved by a method having the features of

Claim 1. Because so-~~"~~ The present invention provides a method for transmitting at least one message, the method including coding each of the at least one message using a respective orthogonal function so as to form a transmission signal, each respective orthogonal function being an approximation of a respective Hermite function. A Fourier transform is performed on a received signal, and then the Fourier transformed received signal is decoded using the respective orthogonal function so as to obtain the at least one message. Use is made of the property that, except for a multiplicative constant, Hermite functions do not change during a Fourier transform--.

On page 1, delete ~~lines 18-19.~~

On page 1, line 21, ~~before "invention" insert --present--.~~

On page 1, line 26, ~~before "invention" insert --present--.~~

Ay On page 2, replace lines 17-23 with ~~-~~The present invention also provides a circuit arrangement for transmitting at least one message, the circuit arrangement including a coding device at a transmission side for coding each of the at least one message using a respective orthogonal function so as to form a transmission signal, each respective orthogonal function being an approximation of a respective Hermite function. A demodulation device is included at a receiving side for recovering the at least one message from a received signal via a decoding using the respective Hermite function. The demodulation device includes a Fourier-transform device for performing a Fourier transform on the

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received signal before the decoding.

On page 2, line 25, before "invention" insert --present--.

On page 2, line 28, change "Multiplier and" to --A multiplier and an--.

On page 3, delete lines 1-3.

~~NM5~~ On page 3, line 5, before "invention" insert --present--.

On page 3, before line 11, insert --Brief Description of the Drawings--.

On page 3, line 11, before "invention" insert --present--.

~~NM6~~ On page 3, line 12, change "drawing" to --drawings--.

On page 3, before line 24, insert --Detailed Description--.

On page 3, line 27, change ", a number of L multipliers 9 which" to --a number L, of multipliers 9, which--.

On page 4, line 25, change "of L" to --L of--.

On page 6, line 11, after "1988" insert --, which is herewith incorporated by reference herein,

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~~NM6~~ On page 8, line 12, change "essentially" to --fundamentally--.

On page 9, line 1, change "Patent Claims" to --WHAT IS CLAIMED IS--.

### IN THE CLAIMS

Please cancel without prejudice claims 1-12 and the substitute claims 1-10 annexed to the International Preliminary Examination Report, and add new claims 13-23 as follows:

--13. (new) A method for transmitting at least one message, the method comprising:

coding each of the at least one message using a respective orthogonal function so as to form a transmission signal, each respective orthogonal function being an approximation of a respective Hermite function;

performing a Fourier transform on a received signal; and

then decoding the Fourier transformed received signal using the respective orthogonal function